

## Short Communications

Pakistan J. Sci. Ind. Res., Vol. 30, No. 1, January 1987

### LEAF SPOT DISEASE OF PEA (*PISUM SATIVUM* L.) CAUSED BY *ALTERNARIA TENUISSIMA* (KUNZE EX PERS) WILTSHIRE

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(Received May 25, 1986; revised October 19, 1986)

*Key words: Alternaria tenuissima; Pea leaf spot; Disease of pea.*

#### INTRODUCTION

During a survey of foliicolous fungi in the experimental field at the Crop Diseases Research Institute, Karachi, a leaf spot disease of pea (*Pisum sativum* L.) was observed in the month of February 1986. The disease manifests itself in the form of small dark brown to black colored irregular lesions with a distinct black powdery growth of *Alternaria* spp. Spots generally started along the margins and the tips of the affected leaves. Under severe attack, spots coalesced and covered the entire leaf surface including the pods (Fig. 1). Infected leaves were chlorotic becoming black and finally defoliated. Young leaves were more susceptible than older ones and the incidence of the disease observed was 60-80 %.

Pea seedlings six weeks old raised in 15 cm. dia. pots were inoculated with a spore suspension of *A. tenuissima* obtained from a week old culture on PDA. The inoculated and control plants were placed in a moist chamber for 36 hr. and then placed on a laboratory bench. Symptoms of the disease were observed 6 days after inoculation. On reisolation, the fungus was found to be identical with the original isolate.

On microscopic examination, the fungus was identified as *Alternaria tenuissima* (Kunze ex Pers.) Wiltshire which closely agrees with the description given by Ellis [1]. There does not appear to be any previous record of *A. tenuissima* on pea from Pakistan [2-3]. A brief description of the fungus is as follows :

Conidiophores solitary or in group, straight to cylindrical, septate, pale to mild pale brown having 1 to many scars, measuring 118  $\mu$  long, 4-6  $\mu$  thick. Conidia solitary or in short chain 1-2 or 3, straight or slightly curved, obclavate, tapering gradually, beak half the length of the

conidium. Conidium pale to mild golden brown, usually smooth, some minutely verruculose, 4-7 transverse and many longitudinal septa, measuring 23-96  $\mu$  x 6-19  $\mu$ .



Fig. 1. Leaf spot of *Alternaria tenuissima* of pea.

*Acknowledgement.* The authors are thankful to Dr. A. Ghaffar, Professor, Plant Pathology, University to Karachi, for help in the identification of fungus. The specimen has been deposited in the Mycological Herbarium, Karachi, Vide Acc. No. 4011.

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